Case No.: MJ 536

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

Bristol-Myers Squibb Company

U.S. Patent No.: 4,338,317

Issue Date:

For:

July 6, 1982 Phenoxyethyl-1,2,4-Triazol-3-one Antidepressants

Inventors:

Davis L. Temple Jr.; Walter G. Lobeck, Jr.

APPLICATION FOR EXTENSION OF PATENT TERM UNDER 35 USC 156

Honorable Commissioner of Patents and Trademarks Washington, DC 20231

JAN 20 1995

Dear Sir:

S. .. _rnuc.: AnvisiOFFICE

In accordance with the provisions of 35 USC 156, Bristol-Myers Squibb Company, a corporation of the state of Delaware, having a place of business at 5 Research Parkway, Wallingford, Connecticut 06492-7660, hereby applies for an extension of two years of the term of United States Patent No. 4,338,317 issued July 6, 1982.

The following items are relevant and follow the guidelines set forth by the United States Patent and Trademark Office Rules of Practice; 37 CFR §1.710, et seq.

This application for extension is based upon the 1) regulatory review period before the Food and Drug Administration of SERZONE®. SERZONE is the trademark of Bristol-Myers Squibb Company for an antidepressant drug product having as its active ingredient nefazodone

hydrochloride. The package insert for SERZONE is enclosed herewith as Appendix 1.

Nefazodone hydrochloride is designated chemically as 2-[3-[4-(3-chlorophenyl)-1-piperazinyl]propyl]-5-ethyl-4-(2-phenoxyethyl)-2 \underline{H} -1,2,4-triazol-3(4 \underline{H})-one, hydrochloride salt, and has the following structure

- 2) Regulatory review of SERZONE occurred under Section 505 of the Federal Food, Drug and Cosmetic Act (21 USC 355).
- 3) SERZONE received permission for commercial marketing and use under Section 505 of the Federal Food, Drug and Cosmetic Act on December 22, 1994.
- 4) Nefazodone hydrochloride is the only active ingredient in SERZONE. Nefazodone hydrochloride has <u>not</u> been previously approved for commercial marketing or use under the Federal Food, Drug and Cosmetic Act, the Public Health Service Act or the Virus-Serum-Toxin Act.
- 5) This application for extension of the term of United States Patent No. 4,338,317 is being submitted within the 60 day period permitted for submission pursuant to 37 CFR §1.720(f) beginning on December 22, 1994. The last day on which the application could be submitted is February 20, 1994.
- 6) This application for extension of patent term seeks to extend the term of United States Patent No. 4,338,317 issued July 6, 1982, which unless extended will expire on March 16, 2001, under provisions of the recently enacted Uruguay Round Agreements Act. This patent has <u>not</u> previously been extended.

The inventors named in the patent are Davis L. Temple, Jr. and Walter G. Lobeck, Jr. The patent is owned by Bristol-Myers Squibb Company by means of an assignment to a wholly-owned subsidiary, Mead Johnson and Company. The pertinent assignment was recorded on June 12, 1981 in the United States Patent and Trademark Office at Reel 3860, Frame 0473.

- 7) Attached hereto as Appendix 2 is a copy of United States Patent 4,338,317.
- 8) No disclaimers, certificates of correction, or reexamination certificates have been filed or issued in United States Patent No. 4,338,317. Copies of receipts for maintenance fee payments issued by the USPTO on January 6, 1986; January 6, 1990; and January 6, 1994 are attached as Appendix 3.
- 9) United States Patent No. 4,338,317 claims nefazodone hydrochloride, the active ingredient in SERZONE. The package insert for SERZONE shows that it is in tablet form. SERZONE is approved in tablet strengths of 50, 100, 200, 250 and 300 mg/tablet.

Claims 1 through 9 as allowed in United States Patent No. ,338,317 each include nefazodone hydrochloride within its scope. Note in particular the structural formula set out in Claim 1.

In Claim 1,

can be

and a "pharmaceutically acceptable acid addition salt thereof" includes the hydrochloride salt. Thus, Claim 1 coverage of salts of nefazodone covers nefazodone hydrochloride. Claims 3, 6 and 9 specifically cover nefazodone hydrochloride, its antidepressant use, and its pharmaceutical compositions, respectively.

A description of each claim of U.S. Patent No. 4,338,317 follows.

<u>Claim 1</u> of U.S. Patent No. 4,338,317 generically covers nefazodone, the active base ingredient of the approved product SERZONE and several closely related congeners and their pharmaceutical salts.

<u>Claim 2</u> specifically covers the base form of nefazodone, the active ingredient in the approved product, SERZONE.

<u>Claim 3</u> covers nefazodone hydrochloride, the salt form used in the approved product SERZONE.

<u>Claim 4</u> covers the method of use of nefazodone and related compounds as given in Claim 1 for treating a mammal afflicted with depression.

<u>Claim 5</u> covers the use of the free base form of nefazodone in the method of Claim 4.

<u>Claim 6</u> covers the use of nefazodone hydrochloride according to the method of Claim 4.

<u>Claim 7</u> covers a pharmaceutical composition comprising an antidepressant amount of a compound set forth in Claim 1.

<u>Claim 8</u> covers a pharmaceutical composition comprising an antidepressant amount of the free base nefazodone according to the pharmaceutical composition of claim 7.

<u>Claim 9</u> covers the pharmaceutical composition of claim 7 comprising an antidepressant amount of nefazodone hydrochloride.

-5-

Case No.: MJ 536

10) The relevant dates and information pursuant to 35 USC 156(g) that will enable the Secretary of Health and Human Services to determine the applicable regulatory review period are as follows:

For 35 USC 156(g)(1)(B)(i)-

The Notice of Claimed Investigational Exemption for a New Drug (IND number 20-993) for nefazodone hydrochloride, under the provisions of Section 505(i) of the Federal Food, Drug and Cosmetic Act, was filed on October 15, 1982, and became effective on November 17, 1982.

The New Drug Application (number 20-152) for SERZONE, under Section 505(b) of the Federal Food, Drug and Cosmetic Act, was filed on September 6, 1991.

For 35 USC 156(g)(1)(B)(ii)-

The New Drug Application (number 20-152) for SERZONE, under Section 505(b) of the Federal Food, Drug and Cosmetic Act, was filed on September 6, 1991.

The New Drug Application (number 20-152) for SERZONE, under Section 505(b) of the Federal Food, Drug and Cosmetic Act, was approved on December 22, 1994.

11) The following is a brief description of certain significant activities undertaken by Bristol-Myers Squibb Company during the applicable regulatory review period with respect to SERZONE including the dates applicable to such activities. Numerous other activities occurred which are not being listed here but are set forth in chronologies attached as Appendices 4 and 5. Continuing from the date of the final use in humans through the time of FDA approval, there were clinical studies in progress and/or being planned, with regular and frequent communications between Bristol-Myers Squibb Company and the FDA, and between Bristol-Myers Squibb Company and its clinical investigators.

Investigational New Drug October 15, 1982 Application 20-993 was filed. This provided for initial clinical studies under Protocol 030A2-001. The first use in humans in the November 22, 1982 United States. "End of Phase II" meeting is held March 13, 1990 with the FDA to discuss the further clinical development of nefazodone HCl. "Pre-NDA" meeting is held to February 11, 1991 discuss content and format of proposed New Drug Application (NDA) for nefazodone HCl. Meeting is held with FDA to March 27, 1991 discuss the manufacturing and

controls sections of proposed NDA

for nefazodone HCl.

Patent Case No.: MJ 536

September 6, 1991	-	New Drug Application for SERZONE (nefazodone HCl) is submitted.
January 7, 1992	-	FDA requests additional statistical analyses of data from certain placebo-controlled trials.
January 17, 1992	-	Safety Update No. 1 is submitted.
January 30, 1992	-	Meeting with FDA to discuss computer systems that will be provided in an effort to expedite the review of the NDA.
February 26, 1992	· -	Additional statistical analyses requested on January 7, 1992 are submitted.
June 18, 1992	-	Teleconference is held with FDA to discuss, <i>inter alia</i> , response to request for additional statistical analyses.
July 19, 1993	-	Psychopharmacologic Drugs Advisory Committee discusses SERZONE and recommends approval.
October 28, 1992	-	Safety Update No. 2 is submitted.
November 7, 1994	-	FDA letter is received that indicates FDA has completed its review and concludes that SERZONE NDA is approvable.
November 17, 1994	-	BMS submits response to Approvable letter including additional safety data.
November 23, 1994	-	Revised draft labeling is submitted.

December 8, 1994 - Final labeling is negotiated with FDA at meeting.

December 22, 1994 - NDA No. 20-152 for SERZONE is approved.

12) It is the opinion of Bristol-Myers Squibb Company that United States No. 4,338,317 is eligible for a two-year extension of its term since:

- (a) It claims the composition of matter of the active ingredient nefazodone hydrochloride, pharmaceutical compositions and antidepressant use of the approved human drug product, SERZONE;
- (b) The term of said patent has never been previously extended;
- (c) The application for extension of patent term is submitted by the owner of the patent, Bristol-Myers Squibb Company;
- (d) The product, SERZONE, has been subject to regulatory review prior to commercial marketing or use;
- (e) The product received permission for commercial marketing or use on December 22, 1994 and the application for patent term extension has been submitted within 60 days from that date;
- (f) The term of the patent has not expired prior to this date of application; and
- (g) No other patent term has been extended for the same regulatory review period for this product.

The length of extension claimed was determined in accordance with 35 USC §156(g) and 37 CFR §1.775(d). Since the subject patent, United States Patent No. 4,338,317 was issued prior to the 1984 enactment of §156 and the clinical investigation under IND 20-993 also commenced prior to the 1984 enactment date, the period of extension based on the regulatory review may not exceed two years.

The total extension time comprises one-half of the sum total of days of the testing and approval periods. In the present case, the pertinent dates are:

Case No.: MJ 536

Patent issued:

July 6, 1982

Testing period began: November 17, 1982

NDA submitted:

September 6, 1991

NDA approved:

December 22, 1994

Calculation of the total extension time pursuant to 37 CFR §1.775(d)(4) yields 2210 days according to the formula:

$$\frac{1}{2}$$
 x $\left[3215 \left(\text{number of days from IND} \atop \text{to submission of NDA} \right) + 1204 \left(\text{number of days from NDA submission to NDA approval} \right) \right]$

However, 37 CFR §1.775(d)(6)(ii)(A) applies and provides an extension period limited to two years. Since it is the earlier date which is to be applied, the extension period being sought therefore is for a two-year period.

- Bristol-Myers Squibb Company and the undersigned 13) acknowledge a duty to disclose to the Commissioner of Patents and Trademarks and the Secretary of Health and Human Services any information that is material to the determination of entitlement to the extension sought.
- 14) Authorization in accordance with 37 CFR §1.20(j) is given to charge the One Thousand Dollar (\$1,000.00) fee for receiving and acting upon the application for extension to Deposit Account No. 02.3850. In the event the actual fee differs from this amount, it is requested that the overpayment or underpayment be credited or charged to Deposit Account No. 02.3850.
- The name, address, and telephone number of the person 15) to whom inquiries and correspondence relating to this application for patent term extension should be directed is:

Richard P. Ryan Bristol-Myers Squibb Company P.O. Box 5100 Wallingford, CT 06492 Phone: 203-949-3723

- 16) A duplicate copy of this application, certified as such, is enclosed.
- 17) A signed declaration by a representative of Bristol-Myers Squibb Company is submitted herewith in compliance with 37 CFR 1.740(a)(17).

Respectfully submitted,

Dated: 19 Jan 95

Richard P. Ryan

Registration No. 30,491 Attorney for Applicants

Bristol-Myers Squibb Company

P. O. Box 5100

Wallingford, CT 06492-7660

Phone: (203) 949-3723

Case No.: MJ 536

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

Bristol-Myers Squibb Company

U.S. Patent No.: 4,338,317

Issue Date:

July 6, 1982

For:

Phenoxyethyl-1,2,4-Triazol-3-one Antidepressants

Inventors:

Davis L. Temple Jr.; Walter G. Lobeck, Jr.

DECLARATION IN ACCORDANCE WITH 37 CFR §1.740(b)

Honorable Commissioner of Patents and Trademarks Washington, DC 20231

- I, Richard P. Ryan, residing at Middletown, Connecticut, declare as follows:
 - That I am an assistant patent counsel of Bristol-Myers 1. Squibb Company, a corporation of the state of Delaware, having a place of business at 5 Research Parkway, Wallingford, Connecticut 06492-7660; I am an attorney registered to practice in the United States Patent and Trademark Office under registration no. 30,491 and I have general authority from Bristol-Myers Squibb Company to act on its behalf in patent matters.
 - That Bristol-Myers Squibb Company is the owner of the 2. entire right, title and interest in United States Patent No. 4,338,317.
 - That I have reviewed and understand the contents of the 3. Application for Extension of Patent Term Under 35 USC 156 for United States Patent No. 4,338,317 which is submitted herewith.
 - That I believe that the above-identified patent is subject to 4. an extension pursuant to 37 CFR §1.710.

Case No.: MJ 536

5. That I believe that a two-year extension of the term of the patent is fully justified under 35 USC 156 and the applicable regulations.

-2-

6. That I believe that the patent for which the extension is being sought meets the conditions for extension of the term of a patent as set forth in 37 CFR §1.720.

I declare further that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements are made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of this application for extension of patent term and the validity of United States Patent No. 4,338,317.

Respectfully submitted,

Dated: 19 Jan 95

Richard P. Ryan

Registration No. 30,491 Attorney for Applicants

Bristol-Myers Squibb Company

P. O. Box 5100

Wallingford, CT 06492-7660

Phone: (203) 949-3723

Inventors:

Davis L. Temple Jr.; Walter G. Lobeck, Jr.

Applicant:

Bristol-Myers Squibb Company

U.S. Patent No.: 4,338,317 **Issue Date:**

July 6, 1982

For:

PHENOXYETHYL-1,2,4-TRIAZOL-3-ONE

ANTIDEPRESSANTS

- Application for Extension of Patent Term Under 35 U.S.C. 156, with 1) attachments
 - Declaration (i)
 - SERZONE® Package Insert (Appendix 1) (ii)
 - U.S. Patent 4,338,317 (Appendix 2) (iii)
 - Receipts for maintenance fee payments (Appendix 3) (iv)
 - Chronology Post IND Activities (Appendix 4) (v)
 - Chronology NDA Activities (Appendix 5) (vi)
- Certified copy of above 2)
- 3) Three courtesy copies of above

RECEIVED

JAN 2 0 1995

ST. ________ITHUL. IAINIO OFFICE A. PATENTS

APPENDIX 1

SERZONE® package insert

200 mg, or 250 mg of nefazodone hydrochloride and the following inactive ingredients: microcrystalline cellulose, povidone, sodium starch glycolate, colloidal silicon dioxide, magnestum stearate, and iron oxides (red and/or yellow) as colorants.

CLINICAL PHARMACOLDGY

Pharmacodynamics
The mechanism of action of nefazodone, as with other antidepressants, is unknown.
Precinical studies have shown that nefazodone inhibits neuronal uptake of serotonin and norepinephrine.

Nefazodone occupies central 5-HT₂ receptors at nanomolar concentrations, and acts as an antagonist at this receptor. Nefazodone was shown to antagonize alpha,-adrenergic receptors, a property which may be associated with postural hypothersion. In vitro binding studies showed that nefazodone had no significant affinity for the following receptors: apha₂ and beta adrenergic, 5-HT_{1A}, cholinergic, dopaminergic, or benzodiazepine.

Pharmacokinetics.

Pharmacokinetics.

Pharmacokinetics.

Pharmacokinetics.

Pharmacokinetics.

Pharmacokinetics.

Netazodone pytrochioride is rapidly and completely absorbed but is subject to extensive metabolism, so that its absolute bioavailability is low, about 20%, and variable. Peak plasma concentrations occur at about one hour and the half-life of nefazodone and its pharmacologically similar metabolite. hydroxynetacodone, earlibth nonlinear kinetics for both dose increases and more than expected uncreased in paper dosing with 50, 100, and 200 mg, the AUC for nefazodone and hydroxynetazodone in the compared to single dosing, for example, in a multiple-dose study involving BID dosing with 50, 100, and 200 mg, the AUC for nefazodone and hydroxynetazodone in a multiple-dose study involving BID dosing with 50, 100, and 150 mg, the accumulation ratios for nefazodone and hydroxynetazodone for a multiple-dose study involving BID dosing with 25, 50, 100, and 150 mg, the accumulation ratios for nefazodone and hydroxynetazodone AUC, after 5 days of BID dosing relative to the first dose, ranged from approximately 3 to 4 at the lower doses (200-300 mg/day); there were also approximately 2- to 7 at the higher doses (200-300 mg/day); there were also approximately 2- to 4-full increases in C_{max} after 5 days of BID dosing relative to the first dose, suggesting extensive and greater than predicted accumulation of nefazodone and metabolite concentrations are attained within 4 to 5 days of initiation of BID dosing on the adviserable for the adviserable for a decrease.

Nefazodone is extensively metabolited dafter oral administration by n-deality interesting extensive and greater the processed on the adviserable dosing strain 1% of administration and eliphastic and anomatic hydroxydialdon, and less than 1% of administration and elimination half-lives for these three metabolites were as tollows:

Horner Horner Metabolites and the AUC (morphasidone Metabolites derivery of the Auc Muttiple and the Auc Muttiple and 11/2 for 15-

(nefazodone hydrochloride)

Tablets

SERZONE®

o mg BlD)	11/2	1.5-4 hrs	4-8 hrs	18 hrs
AUC Multiples and T1/2 for Three Metabolites of Nefazodone (100 mg BID)	AUC Muttiple	0.4	0.07	4.0
AL Three Metab	Metabolite	HO-NEF	щСРР	Triazole-dione

AUTION: Federal law prohibits dispensing without prescription.

nefazodone hydrochloride)

ablets ESCRIPTION

SERZONE®

Bristol-Myers Squibb Company

HO-NEF possesses a pharmacological profile qualitatively and quantitatively similar to that of nefazodone. mCPP has some similarities to nefazodone, but also has agoinst activity at some serrotonegic receptor subtypes. The pharmacological profile of the trizzole-done metabolite has not yet been well characterized. In addition to the above compounds, several other metabolites were present in plasma but have not been tested for pharmacological activity.

After oral administration of radiolabelled nefazodone, the mean half-life of total label ranged between 11 and 24 hours. Approximately 55% of the administration of radiolabelled nefazodone; the mean half-life of total label ranged between 11 and 24 hours. Approximately 55% of the administration and addioactivity was detected in urine and about 20–30% in faces.

Distribution—Netabolity was detected in urine and about 20–30% in faces.

Distribution—Netabolity of secretarial network in vitro group in the control network is seven.

Zodone ranges from 0.22 to 0.87 k/kg.

Protein Binding—At concentrations at 15–2500 ng/ml. nefazodone is extensively (-99%) bound to human plasma profiteins in vitro. While nefazodone is extensively (-99%) bound to human plasma profiteins in vitro. While nefazodone or other drugs occurs in vitro protein binding of chlorpromazine, designamine, diszpeanin, diphenylitydaritoin, ildocalne, prazosin, propramolol, verapamil, or warfarin, it is unknown whether or not displacement of either nefazodone and decreases the bioavailability of nefazodone by approximately 20%.

Effect of Food—Food delays the absorption of nefazodone and decreases the bioavailability of nefazodone and sport of patients, renal impairment (creatinine clearances ranging from 7 to 60 mL/min/1.73m²) had no effect on steady-gate nefazodone gate steady state were approximately 25% greater than those observed in normal volunteers.

Age/Gender Effezt.—Alter single doses ut 300 mg to younger and older patients, with a multiple doses ut 300 mg to younger and older patients single do

FLZONE (nefazodone hydrochloride) is an antidepressant for oral adminisation with a chemical structure unrelated to selective serotonin reuptake hibitors, thoyctics, tetracyclics, or monoannine oxidase inhibitors (MAOI). Verazodone hydrochloride is a synthetically derived phenylpiperazine antipressant. The chemical name for nefazodone hydrochloride is 2-[3-[4-chlorophenyl]-3H-1,2,4-triazol-3-one monohydrochloride. The molecular mula is C₂₅H₂₂ClN₅O₂ • HCl, which corresponds to a molecular weight of 16.5. The structural formula is:

- Fed

)=N | CH2CH2 | CH2CH2CH2 - N

Treatment with SERZONE should be initiated at half the usual dose in elderly patients, especially women (see DOSAGE AND ADMINISTRATION Section), but the therapeutic dose range is similar in younger and older patients. Clinical Trials Supporting the Effectiveness Claim
The efficacy of SERZONE (nefazodone hydrochloride) as a treatment for depres-

vefazodone hydrochloride is a nonhygroscopic, white crystalline solid. It is sely soluble in chloroform, soluble in propylene glycol, and slightly soluble polyethylene glycol and water. SEZONE is supplied as hexagonal tablets containing 100 mg, 150 mg.

INDICATIONS AND USAGE SERZONE (netazodone hydrochloride) is indicated for the treatment of depres-

SERZUNE (nerazodone nyurocalonos) is indicated for the deguneric of depression.

Sign.

The efficacy of SERZONE in the treatment of depression was established in 6-8 week controlled trias of outpatients whose diagnoses corresponded most closely to the DSM-IIIR category of major depressive disorder (see CLINICAL PHARMACOLOGY Section).

A major depressive episode implies a prominent and relatively persistent depressed or dysphoric mood that usually interferes with daily functioning (nearly every day for at least 2 weeks) it must include either depressed mood or loss of interest in usual activities, significant change in weight and/or appetite, insomnia or hypersonnia, psychomotor agitation or retardation, increased fatigue, feelings of gut or worthlessness, slowed thinking or impaired concentration, a suicide attempt or suicidal ideation.

The antidepressant effectiveness of SERZONE in hospitalized depressed patients has not been adequately studed.

The effectiveness of SERZONE in long-term use, that is, for more than 6 to 8 weeks, has not been assematically evaluated in controlled trials. Therefore, the physician who elects to use SERZONE for extended periods should periodically re-evaluate the long-term usefulness of the drug for the individual patient.

CONTRAINDICATIONS

Coadministration of terfenadine or istemizole with SERZONE (nefazodone hydrochloride) is contraindicated in patieris with known hypersensitivity to nefazodone or other phenylpiperazine antidepressants.

Alprazolam When alprazolam (1 mg BID) and netazodone (200 mg BID) were coadministered, steady-state peak concentrations, AUC and half-life values for alprazolam increased by approximately 2-fold. Netazodone plasma concentrations were unaffected by apprazolam. If alprazolam is coadministered with SERZONE, a

sion was established in two placebo-controlled, short-term triats in outpatients neeting DSM-III or DSM-IIIR criteria for major depression. One was a 6-week dose-titration study comparing SEAZONE in two dose ranges (up to 300 mg/day and up to 600 mg/day [mean moda dose for this group was about 400 mg/day], on a GID schedule) and placebo. The other was an 8-week dose-titration study comparing SERZONE (up to 600 mg/day; mean modal dose was 375 mg/day), in injoramine (up to 300 mg/day, and placebo, all on a BID schedule. Overal!, these studies demonstrated SERZONE, at doses titrated up to 600 mg/day, injoramine (up to 300 mg/day, and placebo, all on a BID schedule. Overal!, these studies demonstrated SERZONE, at doses titrated up to 600 mg/day. Intio Depressed Mood item, CGI Severity score, and CGI Improvement score. Significant differences were also found for certain factors of the HDRS (e.g., anxiety factor, sleep disturbance bactor, and retardation factor). Two other 6-8 week placebo- and impramine-controlled studies in depressed outpatients provided additional support for the superiority of nefazodone (titrated up to 500 or 600 mg/day; mean modal doses of 462 mg/day and 363 mg/day) over placebo.

There were no efficiacy studies focusing specifically on the elderty or on men and women separately. Overall, approximately two-thirds of patients in these trials were women, and an analysis of the effects of gender on outcome did not suggest any differential responsiveness on the basis of sex. There were too few elderly patients in these trials to reveal possible age-related differences in response.

Potential for Interaction with Monoamine Oxidese Inhibitors
In patients receiving antidepressants with pharmacological properties
similar to netazodone in combinatios with a monoamine oxidase Inhibitor
(MADI), there have been reports of serious, sometimes fatal, reactions.
For a selective serotonin reuptake inhibitor, these reactions have include
ed hyperthermia, rigidity, myoclonus, autonomic instability with possible
rapid fluctuations of vital signs, and mental status changes that include
extreme agitation progressing to felirium and come. These reactions
have also been reported in patients who have recently discontinued that
drug and have been started on a MADI. Some cases presented with features resembling neuroleptic malignant syndrome. Severe hyperthermia
and setzures, sometimes fatal, have been reported in association with the
combined use of tricyclic antidepressants and MADIs. These reactions
have also been reported in patients who have recently discontinued these
drugs and have been started on an MADI.
Although the effects of combined use of nefazodone and MADIs have not
been evaluated in humans or animals, because nefazodone is an inhibitor
of both servorum and norepinephrine reuptake, it is recommended that
nefazodone not be used in combinition with an MADI,
interaction with Thazolobenzodiazapines
interaction studies of nefazodone with two triazolobenzodiazepines, i.e., triazolam and alprazolam, metabolized by ortochrome Preplations of these
compounds when administered concomitantly with nefazodone.

friazolam. When a single oral 0.25-mg dose of triazolam was coadministered with nefa-when a single oral 0.25-mg dose of triazolam half-life and AUC increased 4-zodone (200 mg BID) at steady state, triazolam half-life and AUC increased 4-fold and peak concentrations increased 1.7-fold. Nefazodone plasma concen-trations were unaffected by triazolam. Coadministration of nefazodone potentiated the effects of triazolam on psychomotor performance tests if triazolam is coadministered with SERZONE, a 75% reduction in the initial tria-zolam dosage is recommended. For many patients, e.g., the elderry, it is rec-ommended that triazolam not be used in combination with nefazodone. No dosage adjustment is required for SERZONE.

50% reduction in the Initial alprazolam dosage is recommended. No dosage adjustment is required for SERZONE.

Potential Tertenadine and Astenizola Interactions

Potential Tertenadine and Astenizola Interactions

Tertenadine and astenizola are both metabolized by the cytochrome P_{4,2}IIIA₄ taczyme, and it has been demonstrated that keroconazola, erythromych, and other imhibitors of IIIA₄ can block the netabolism of terfenadine and astenizola, resulting in increased plasma concentrations of parent drug, increased plasma concentrations of parent drug, increased plasma concentrations of serious cardiovascular adverse events, including death, due principally to ventricular tachycardia of the torsades de points type. Nofazodone has been shown in vitro to be an inhibitor of IIIA₄. Consequently, it is recommended that nefazodone not be used in combination with either tertenadine or astemizole (see CONTRAINDICATIONS and PRECAUTIONS Sections).

General Postural Hypotension
A pooled analysis of the vital signs monitored during placebo-controlled premarketing studies revasied that 5.1% of netazoobne patients compared to 2.5% of placebo patients (p-5.01) met criteria for a potentially important decrease in blood pressure at some time during treatment (systolic blood pressure as some time during treatment (systolic blood pressure as some time during treatment systolic blood pressure as the proportion of netazoobne and placebo patients having adverse events characterized as prostural hypotension were as follows: netazoohne (2.8%), trip-dic antidepressants (10.9%), SSR (1.1%), and placebo (0.8%). Thus, the prescriber should be aware that there is some risk of postural hypotension in association with netazoohne use. SERZONE should be used with caution in patients with netazoohne use. SERZONE should be used with caution in patients with known cardiovascular or cerebrovascular disease that could be exacerbated by hypotension (history of myocardial infarction, angina, or ischemic stroke) and conditions that would predispose patients to hypotension (dehydration, hypovolemia, and treatment with antihypertensive medication).

Activation of Mania/Hypomania

Activation of Mania/Hypomania

**During permarketing testing, hypomania or mania/hypomania is a notown risk in a small proportion of patients with major affective disorder treated with other marketed antidepressants. As with all antidepressants, SERZONE (netazoobne hydrochloride) should be used cautiously in patients with a history of mania.

Suricide

**During temarketing attempt is inherent in depression and may persist until significant remission occurs. Glose supervision of high risk patients should accompany initial drug therapy. Prescriptions for SERZONE should be written in order to reduce the risk of overdose.

Seizures

During premarketing testing, a recurrence of a petit mal seizure was observed in a patient receiving metazocone who had a history of such seizures. One nonstruction premarketing netazocone who had a history of such seizures. One nonstructions; this person reportedly experienced a convulsion (type not documented).

Priapism

While priapism did not occur during premarketing experience with nefazodone, it priapism has been reported with a structurally related drug, trazodone, it patients present with provonged or inappropriate erections, they should discontinue therapy immediately and consult their physicians. If the condition persists for more than 24 hours, a urologist should be consulted to determine appropriate management.

Use in Patients with Concomitant illness

SERZONE has not been evaluated or used to any appreciable extent in patients with a recent history of myocardial infarction or unstable heart disease. Patients with these diagnoses were systematically excluded from clinical studies during the product's premarketing testing. Evaluation of electrocardiograms of 1153 patients with orceved nefazodone in 6- to 8-week, double-blind, placebo-controlled trials did not indicate that nefazodone is associated with the development of clinically important ECG abnormalities. However, sinus brady-cardial effined as heart rate 550 bpm and a decrease of at least 15 bpm from baseline, was observed in 1.5% of nefazodone-treated patients compared to 0.4% of placebo-treated patients (9-50.05). Because patients with a recent history of myocardial infarction or unstable heart disease were excluded from clinical rials, such patients should be treated with caution.

In patients with cirrhosis of the liver, the AUC vatues of nefazodone and HONE were increased by approximately 25%.

Information for Patients

Physicians are advised to discuss the following issues with patients for whom they prescribe SERZONE.

Time to Response/Continuation.

As with all antidepressants, several weeks on treatment may be required to obtain the full antidepressant effect. Once improvement is noted, it is important for patients to continue drug treatment as directed by their physician.

Interference With Cognitive and Motor Performance.

Since any psychoactive drug may impair judgment, thinking, or motor skills, patients should be cautioned about operating hazardous machinery, including automobiles, until they are reasonably certain that SERZONE therapy does not adversely affect their ability to engage in such activities.

Pregnancy
Patients should be advised to notify their physician if they become pregnant or intend to become pregnant during therapy.

Nursing
Patients should be advised to notify their physician if they are breing an infant (see PRECAUTIONS Section, Nursing Mothers Suba
Concomitant Medication
Patients should be advised to inform their physicians if they are 1
plan to take, any prescription or over-the-counter drugs, since 1
potential for interactions. Significant caution is indicated if SEF21
be used in combination with either Halcion or Xanax, and concur
with Seldane or Hismanal is contraindicated (see CONTRAINID)
and WARNINGS Sections).

Allectrons
Allectrons
Allectrons
Allectrons
Patients should be advised to avoid alcohol while taking SERZCNA
Allectrons
Patients should be advised to notify their physician if they devero
hives, or a related altergic phenomenon.

Laboratory Tests
There are no specific laboratory tests recommended.

Orug Intranctions
Drugs Highly Bound to Plasma Protein
Because reflactorone is highly bound to plasma protein (see CLINTICA
Because reflactorone is highly bound to plasma protein (see CLINTICA
Because reflactorone is highly bound to plasma protein (see CLINTICA
Because reflactorone is highly bound to plasma protein (see CLINTICA
Because reflactorone is highly bound to plasma protein (see CLINTICA
Because reflactorone by other highly bound drugs.

CNS Active Drugs

Monoamine Oxidase Inhibitors—See WARNINES Section
Haloperidol—When a single real 5-mg dose of haloperidol was on
tered with nefazodone (200 mg BIU) at steady state, haloperidol
clearance decreased by 35% with no significant increase in peak
dol plasma concentrations of time of peak. This change inprint
clearance decreased by 35% with no significant increase in net alloperidol real
essay when coadministered with nefazodone. Dosage adjustment of haloperidol real
essay when coadministered to steady state, there was no changes in the plasma
confinedic parameter for either drug compared to agility er
form acokinetic parameter for either drug compared to agility er
form acokinetic parameter for either drug compared to agility er
comitant use of SERZONE and aboon in depressed patherns, or
higher. SERZONE should be discontinued for as long as Lintchery
other CNS Active Drugs has not been systematically evaluated. Consecution is advised if concomitant administration of SERZONE
adugion is advised if concomitant administration of SERZONE
and angelinets.

Cimetidine When netazodone (200 mg BID) and cimetidine (300 mg QID) we ministered for one week, no change in the steady-state phart-act of either netazodone or cimetidine was observed compared to each of either netazodone or chretidine was observed compared to either of coadministered for one week, no change in the steady-state phart-act of either netazodone or chretidine was observed compared to either of coadministered.

Cardiovascutar Active Drugs
Digoxin—When netazodone (200 mg BID) and digoxin (0.2 mg (coadministered to 9 days to heatthy male volunteers (n=18) we phenotyped as P_{4,60}IID₆ extensive metabolizers, C_{max}, C_{max}, and digoxin were increased by 29%, 27%, and 15%, respectively, Ung no effects on the pharmacoxhiretics of netazodone and this active lites. Because of the narrow therapeutic index of digoxin, caution is exercised when netazodone and digoxin are coadministered; russ monitoring for digoxin is recommended.

Propranolel—The coadministration of netazodone (200 mg BID) in 9 poor and 15 extensive P_{4,60}IID₆ metabolizers, resulted in ±14% reductions in C_{max} and AUC of propranolel. The metabolizer (C_{max} C_{min} and AUC of propranolel, however, C_{max} C_{min} and AUC of home metacodone, hydroxypropranolel. However, C_{max} C_{min} and AUC of home metacodone, hydroxypropranolel. However, C_{max} C_{min} and AUC of hincal respoce.

Pharmacokinetics of Nefazodone in Poor Metabolizers and interaction with Drugs That Inhibit and/or are Metabolizers and Interaction with Drugs That Inhibit and/or are Metabolizers and Interaction with Drugs That Inhibit and/or are Metabolizers and Interaction with Drugs That Inhibit and/or are Metabolizers and Interaction with Brugs Rhat Inhibit and/or are Metabolizers and Interaction with any drugs known to be metabolized by this isozyme—Netazodone with any drugs known to be metabolized by the sonthined use of netazodone with any drugs known in the processery and even in particular, the combined use of netazodone in Poor Metabolizers is ontagined to the page of t

IID₆ Isozyme—A subset (3% to 10%) of the population has reduces of the drug-metabolizing enzyme cytochrome P_{4.50}IID₆. Such incivit referred to commonly as "poor metabolizers" of drugs such as seb dextromethorphan, and the tricyclic antidepressants. The pharmata

metabolizers." Plasma concentrations of one minor metabolitic (mCPP) are increased in this population, the adjustment of SERZONE dosagn is not required when administered to "poor metabolizers" Netabotice and its metabolites have been shown in vitro to be extremely weak inhibitors of P_{4,5}/BO₆. Thus, it is not likely that netabolize will doctease the metabolic clearance of drugs metabolized by this isozyme. By Isozyme—Netazodone and its metabolites have been shown in vitro not to mitibit cytochrome P_{4,5}/A₆. Thus, metabolic interactions between notazodone and drugs metabolized by this isozyme are unlikely

Electro-Convulsive Therapy (ECT)

There are no clinical studies of the combined use of ECT and nefazodone Carcinogenesis, Nutragenesis, Impairment of Fertility
Carcinogenesis and Carcinometric with nefazodone. The dietary admini-

There is no evidence of carcinogenicity with nefazodone. The dietary administration on evidence of carcinogenicity with nefazodone. The dietary administration of nefazodone to rabs and mice for 2 years at daily doses of up to 200 mg/kg, and 800 mg/kg, respectively, which are approximately 3 and 6 times, respectively, the maximum human daily dose on a mg/m² basis, produced no increase in tumors.

Mitagenessis
Nefarodone has been shown to have no genotoxic effects based on the following assays: bacterial mutation assays, a DNA repair assay in cultured rat
hepatbcytes, a mammalian mutation assay in Chinese harrster ovary cells,
an in who cytogenetics assay in rat bone marrow cells, and a rat dominant
lethal study.

impairment of Fertility:

A fertility successe in fertility at 200 mg/kg/
A fertility provincately in rats showed a slight decrease in fertility at 200 mg/kg/
day dipproximately three times the maximum human daily dose on a mg/m²
basis) but not at 100 mg/kg/day (approximately 1.5 times the maximum
human daily dose on a mg/m² basis).

Pregnancy Transport of the property Category C Transport of the program of the pr

Lybor and Delivery

The effect of SERZONE on labor and delivery in humans is unknown.

Unsing Mothers

Is not known whether SERZONE or its metabolities are excreted in human is not known whether SERZONE is an excreted in human milk, cauton should be virised when SERZONE is administered to a nursing woman.

Into Use

I and effectiveness in individuals below 18 years of age have not been lished.

Respiratory Special Senses

to Use 7.500 eddenty (265 years) individuals participated in clinical studies with accorde. No unusual adverse age-related phenomena were identified in control of eddenty patients foreided with reflandone. Due to the increased ternic exposure to netazotone seen in single dose studies in eddenty fents (see CLRICAL PHARMACOLOGY Section, Pharmacochracius Subtritor), treatment should be initiated at haif the usual dose, but titration ward should take place over the same range as in younger patients (see XSAGE AND AUBRINISTRATION Section). The usual precautions should be sserved in elderty patients who have concomitant medical lilinesses or who are receiving concomitant drugs.

ADVERSE REACTIONS
Associated with Discontinuation of Treatment
Approximately 16% of the 3496 patients who received SERZONE (netabactore indirectionate) in worthwide premarketing chinical trials discontinued
treatment due to an adverse experience. The more common (21%) events
in clinical trials associated with discontinuation and considered to be drug
related (i.e., those events associated with dropout at a rate approximately
wince or greater for SERZONE compared to placebo) included: nausea
(3.5%), dizziness (1.9%), insomnia (1.5%), asthenia (1.3%), and agitation
(1.2%).
Incidence in Controlled Trials
Commonly Observed Adverse Events in Controlled Clinical Trials:
The most commonly observed adverse events associated with the use of
SERZONE (incidence of 5% or greater) and not seen at an equivalent incidence among placebo-treated patients (i.e., significantly higher incidence
for SERZONE compared to placebo, resulted patients, (i.e., significantly higher incidence
for SERZONE compared to placebo, psc0.05), derived from the table below,
were: sormolence, dry mouth, nausea, dizziness, constitution, astheria,
lightheadedness, blurred vision, confusion, and abnormal vision.

Adverse Events Counting at an incidence of 1% or More Among SERZONE. Treated Patents:
The table that follows enumerates adverse events that occurred at an incidence of 1% or more, and were more frequent than in the placebo group, among SERZONE-treated patients who participated in short-term (6- to 8-week) placebo-controlled trials in which patients were observed with SERZONE tranges of 300 to 600 mg/day. This table shows the percentage of patients in each group who had at least one episode of an event at some time during their treatment. Reported adverse events were classified using a standard COSTART-based Dictionary terminology.

the incidence of side effects in the course of usual medical practice where patient characteristics and other factors differ from those which prevailed in the clinical trials. Similarly, the cited frequencies cannot be compared with figures obtained from other clinical investigations involving different treatments, uses, and investigators. The cited figures, however, do provide the prescribing physician with some basis for estimating the relative contribution of drug and non-drug factors to the side-effect incidence rate in the population studied

	,	SEMANNE	riacebo	
Body System	Preferred Term	(n=393)	(n=394)	
Body as a Whole	Headache	36%	33%	
	Astheria	* =	\$. \$.	
	Infection	**	9 %	
	Flu syndrome	*	ž	
	Chits	ž	<u>.e</u>	
	Fever	%	ž	
	Neck Rigidity	ž	•	
Cardiovascular	Postural hypotension	4	<u>~</u>	
	Hypotension	ž	<u>~</u>	
Dermatological	Pruntus	×2.	ž	
•	Rash	Ł	<u>*</u>	
Gastrointestinal	Dry mouth	25%	13%	
	Nausou	25%	12%	
	Constipation	34	% 8	
	Dyspepsia	*6	<u>*</u>	
	Diarrhea	.*. 8%	*	
	Increased appetite	2%	3%	
	Nausea & Vomiting	5%	*	
Metabolic	Peripheral edema	3%	5%	
	Triest	*	_^ ₹	
Musculoskeletak	Arthraigia	ž	<u>^</u>	
Nervous	Somnolence	25%	2.	
	Dizziness	17%	3 ⁸ 45	
	Insomnia	* *	\$	
	Lighthreadedness	1 0%	36	
	Contusion	ž	ž	
	Memory impairment	*	ž	
	Paresthesia	¥	% 13	
•	Vasodulatation:	ž	*	
	Abnormal dreams	ž	2%	
	Concentration decreased	*E	<u>*</u>	
	Ataxia	2	0	
	Incoordination	ž	*	
	Psychomotor retardation	ź	£ -	
	Tremor	2%	<u>~</u>	
	Hypertonia	*	0	

Fevents reported by at least 1 km of patients treated with SERZONE and more frequent than the placebo group are included: incidence is rounded to the nearest 1 k (<1% indicates an incidence less than 0.5%). Events for which the SERZONE incidence was equal to or less than placebo are not listed in the table, but included the following: abdominal pair, pair lack pair, accidental injury, chest pair, neck pair, pabrilation, migraline, sweating, flatuence, vormiting, anciental, tooth disorder, weight gair, eferna, myalqia, cramp, agitation, anviety, depression, hypestress, OKS stimulation, dysphoria, emotional lability, according to the intervention of spaneorentess, or systematics, and strains and strains and strains of spaneorentess, or systematics.

2 Vascolitation—flashing, general rails:
4 Abnormal vision—ecotoma, visual trails:
4 Abnormal vision—ecotoma, visual trails:
5 Abnormal vision—ecotoma, visual trails:
6 Abnormal vision—ecotoma, visual trails:
7 The table that follows enumerates adverse events that were more frequent in the SERZONE dose range of 300 to 600 mg/day than in the SERZONE dose ranges as self-stimulation stows only those adverse events for which there was a statistically significant difference (ps0.05) in incidence between the SERZONE dose ranges as well as a difference between the high dose ranges as well as a difference between the high

Dose Dependency of Adverse Events in Placeto-Controlled Trials SERZONE SERZONE SERZONE STORMENT STORMENT SERVING SERVI

		7	Ch-con morasy	Sauc mg/day	73000	
8	Rody System	Preferred Term	(n = 209)	$(n = 2\overline{11})$	(n = 212)	
13	Sastrointestinal	Nausea	23%	14%	12%	
		Constipation	17%	<u>\$</u>	% %	
ž	dervous	Sommolerico	28%	16%	13%	
		Dizziness	*	<u>-</u>	*	
		Comfusion	*	ž,	*	
æ	pecial Senses	Abnormal vision	%	0	£	
		Blurred vision	Š	*	ž	
		Timothic	ž	¢	7	

Events for which there was a statistically significant difference (p≤0.05) between the netazodone dose groups.

Laboratory Change:
Of the serum chemistry, serum hematology, and urhalysis parameters monitor during placebo-controlled premarketing studies with netazodom a pooled analysis revealed a statistical frend between netazodome and placebo for hematocrit, i.e., 2.8% of netazodome patients met criteria for a potentially important decrease in hematocrit (537%, male or 532% female) compared to 1.5% of placebo patients (0.05.cp.6). (0). Decreases in hematocrit, presumably dilutional, have been reported with many other drugs that block alpha₁-adrenergic receptors. There was no apparent clinical significance of the observed changes in the few patients meeting these criteria.

of the ECG parameters monitored during placebo-controlled premarketing studies with nefazodone, a pooled analysis revealed a statistically significant difference between nefazodone and placebo for sinus bradycadia, i.e., 1.5% of nefazodone patients met criteria for a potentially important decrease in heart rate (£50 ppm and a decrease of ≥15 ppm) compared to 0.4% of placebo patients (p<0.05). There was no obvious clinical significance of the observed changes in the few patients meeting these criteria.

Other Events Observed During the Premarkating Evaluation of SERZONE

During its premarkating assessment, multiple doses of SERZONE were administrated to 3.496 patients. Inclinical studies, including more than 250 patients treated for at least one year. The conditions and duration of exposure to SERZONE wared greatly, and included (in overlapping categories) open and double-blind studies, uncontrolled and controlled studies, inpatient and outpatient studies, blind studies, uncontrolled and controlled studies, inpatient and outpatient studies, blind studies, uncontrolled and controlled studies, inpatient and outpatient studies, blind studies, uncontrolled and controlled studies, inpatient and outpatient studies, blind studies, uncontrolled and controlled studies, inpatient and outpatient studies blind studies, inpatient studies were recorded by clinical investigators using terminology of their own choosing. Consequently, it is not possible to promote a meaningful strainate of the proportion of individuals expenencing analyses of variance devents without first grouping strainar types of untitoward events into a snaker number of standardized event astandard COSTART-based Dictionary transloops. The frequencies presented, therefore, represented between the proportion of the 3496 patients exposed to multiple doses of SERZONE who experienced an event of the type cited on at least one occasion while neceiving SERZONE. All reported events are included except those events listed in other safety-related sections of this insert, those adverse experiences subsumed under COSTART terms that are either overly general or excessively specific so as to be uninformative, those events for which and occurred in fewer than two patients.

It is important to emphasice that, attitude the events which and ested of decreasing frequency according to the following definitions; frequent deverse events in the produced on one or more occasions in at least 1/100 patients; rare events are bose occurring in fewer than in the labelance occurring in

Body as a whole—Infrequent altergic reaction, malaise, photosensitivity reaction, face edema, hangover effect, abdonen enlarged, hemia, pelvic pain, and halitosis. Rare: cellulitis.

Cardiovascular system—infequent: tachycardia, hypertension, syncopo, ven-tricular extrasystoles, and angina pectoris Rare. AV block, congestive heart fallure, hemorrhage, pallor, and varicose vein.

Comathological system—Introduent: dry skin, acno, alopecia. urticaria, macutopapular rash, vesiculibulitous rash, and eczema.

Gastrantestinal system—Textuent, gastroententis, infrequent: eructation, periodontal abscess, abnormal liver function tests, ghighirits, colliss, gastrits, mouth
ucceration, stomatitis, esopragitis, peptic ulcor, and rectal hemoritage. Racri
uccerative collits. Hemic and Imphatic system—Introquent: ecchymosis, anemia, leukopenia, and Imphadenopathy.

Metabolic and nutritional system—entrequent weight loss, gout, dehydration, lactic dehydrogenase increased, SGOT increased, and SGPT increased. Farc: hypercholesteremia and hypoghycemia.

Musculoskeletal system—infrequent: arthritis, tenosynovitis, muscle stiffness, and bursitis. Rare: tendinous contractum.

Respiratory system—Frequent: dyspnea and bronchitis. Infrequent: asthma, precurnonia, faryngitis, voice alteration, epistaxis, hiccup. Rare: hyperventilation

Programmer or yearous DRUG ABUSE AND DEPENDENCE Controlled Substance Class SERZONI (reflaxodone hydrochloride) is not a controlled substance: Physical and Psychological Dependence: in animal studies, nelazodone did not act as a reinforcer for intravenous self administration in monkeys trained to self-administer cocaine, suggesting no abuse liability, in a controlled study of abuse liability in human subjects, nefa zodone showed no potential for abuse. Nelazodone has not been systematically studied in humans for its potential for tolerance, physical dependence, or withdrawal while the premarketing chinical experience with nelazodone did not reveal any tendency for a with drawal syndrome or any drug-seeking betavior, it is not possible to predict on the basis of this limited experience the extent to which a DNS-active drug will be misused, diverted, and/or abused once marketed. Consequently, physicians should carefully evaluate pathents for a history of drug abuse and follow such patients closely, observing them for signs of misuse or abuse of SERZONE (e.g., development of tolerance, dose escalation, drug-seeking behavior).

OVERDOSAGE

Human Experience

There is very limited expenence with nefazodone overdose. In premarketing clinical studies, there were seven reports to nefazodone overdose. In premarketing clinical studies, there were seven reports or nefazodone included mausea, womiting, and sometidence on in combination with other pharmacological agents. The amount of nefazodone ingluded nausea, womiting, and sometidence. One norstudy participant took 2000-3000 mg of nefazodone with methocarbanol and abothol; this person reportedly experienced a convulsion (type not documented). When of the patients died.

Overdosage may Cause an increase in incidence or severity of any of the reported adverse reactions (see ADVERSE REACTIONS Section).

There is no specific antidore for SERJONE (nefazodone hydrocholden). There is no specific antidore for SERJONE (nefazodone hydrocholden). Treatment should be symptomatic and supportive in the case of hypotension or excessive sectation. Any patients suspected of having taken an overdose should have the stomach emptied by gastric kavage.

In manaligning overdosage, consider confacting a poison control center on the treatment of any overdose.

DOSAGE AND ADMINISTRATION
Intral Treatment of any overcose

DOGAGE AND ADMINISTRATION
Intral Treatment
The recommended starting dose for SERZONE (reflazodone hydrochloride) is 200 mg/dzy, administered in two chivided doses (BID). In the controlled clinical trains establishing the antidepressant effects of SERZONE, the effective dose range was generally 300 to 600 mg/dzy. Consequently, most patients, depending on toersality and the need for further clinical effect, should have dose in on a BiD schoulde at intervals of no less than 1 week. As with all antidepressant several weeks on treatment may be required to obtain a full artidepressant response.

Dosage for Edderty or Debilitated Patients
The recommended intial dose for edderty or debilitated patients is 100 mg/dzy on a BID schodule. These patients often have reduced netazodore clearance and/or increased sensitivity to the side effects of CAS-active drugs. It may also be appropriate to modify the rate of subsequent dose tiration. As steady-state pleasin levels do not change with ago, the linal target dose based on a careful assessment of the patient's clinical response may be similar in healthy younger and older patients.

Maintenance/Continuation/Extended Treatment
There is no body of endence available from controlled trials to indicate how long the depressage patient should be treated with SERZONE. It is generally agreed, however, that pharmacological treatment for acute episodes of depression should continue for up to six months or bronger Whether the dose of antidepressant needed to indoce withing relations treatment with SERZONE, the safety of netazodone in long-term use is supported by data from both double-build and open-table Irda's involving more than 250 patients treated for at least one year Seritining Patients to or from a Monamine Ordaese Inflation

Now SIPPLIED

SERZONE** (inclazdoone hydrochloride) tablets are hexagonal tablets inprinted and open-table Irda's involving man 250 patients treated or an about one of the patient streating and more t

Bristol-Myers Squibb Company Princeton, NJ 08543 USA

Printed in USA

Issued December 1994

S. J. COLGAN, B. Sc. ARCS, Ph. D. DIC, CPA P. D. J. WRIGHT, MA, CPA G. K. JENTIMAN, MITMA, CPA D. R. ALLEN, MA, CPA D. G. GELDARD, B. Sc. CPA G. W. HUGHES, B. Tech, MI	FACSIMILE: 0534 74210, ITT GROUPS 2/3 (24 HOURS) RTIFICATE OF PATENTAL THIS PROOF OF renewal is Proof of renewal is lofal receipts kept Signing and returning then be added to each t.	9	-244464-16 MAR81	
G. E. SPENCER, MA, CPA SHEILA F. LESLEY, MA, MITMA, CPA J. N. LEACH, B.Sc., MIM, CPA P. M. GORE, B.Sc., CPA W. J. A. BEESTON, MA, MITMA, CPA M. J. ROOS, CPA	RECEIPT/RENEWAL Pt for the follow Safe place in cas would like your o ease let us know this service woul baid on your acco	e fer ence	OHNSON+CO	
N. WADDLETON, ERD, MA. C.Eng, FIEE, FBIM, CPA M. F. WHITE, MA. C.Eng, FI.Mech.E. CPA W. P. McCallum, MITMA, CPA A. MASSEY, MITMA, CPA C. R. HAIGH, MA. CPA D. G. TAYLOR, B.Sc. CPA	official receipe kept in a time. If you in future, place of £1 for for annuitles	Annuity Your Ref	MJ0536- MEAR	
UNERY, B.Sc. CPA BRAY, B.Sc. MITMA, CPA	e enclos ocument equired od store	Due	7 JAN .06 04	
Nputer Patent Annuities PATENT DESIGN & TRADE MARK RENEWALS WORLDWIDE	RISTOL—MYERS Palent Department (N. Y.) ATENT COUNSEL STAWASZ (S. O. S. O. S. A. S. A. BROGNOG: F. S. A. ACSOUNT 78100	Patent No.	4338317	
PATENT DESIGN & TRADE MARK RENEWALS WORLDWIDE	RISTOL-MYERS PRITTN MS MARY B.S. PATENT COUNSEL 45 PARK AVERGRAVE S.A. 174	۲۲	HALF FEES)	

Computer Parameters of Channel Islands Computer Parameters Inc. Computer Inc. Computer Parameters Inc. Parameters Inc. Computer Parameters Inc.	Oth Duter Patent Annuities	R. B. CHINGEN, B.S. CM. R. C. WALICER, MA, CHA	N. WADDLETON, BRD, MA, C.E.V., PHE, FEM. CHA. N. F. WHITE, MA, C.E.V., PLANGALE, CPA. W. P. MCCALLLIAN, MITTAL, CPA. A. MASSEY, MITTAL, CPA. C. R. HADN, MA, CPA. D. G. TAYLON, B.St., CPA. D. G. TAYLON, B.St., CPA.	G. E. SPENCER, MA, COA. SPERAF, LESSEY, MA, METAL, COA. J. N. LEACH, E.S., MAN, COA. W. J. A. SPESTON, MA, MITAL, COA. M. J. ROOS, COA.	B. J. COLGAN, B.S., ANCS, Ph.D. DC. P. D. J. WRIGHT, M.J. CON. D. R. JENNINGS, M.J. CON. D. R. FENTHAAN, MITHAL CON. D. J. R. ALLEN, M.J. CON. D. G. GELDAND, B.B., CON.
Please maintain the undermentioned cases and forward to official renewal certificates as soon as possible. Veuillez maintenir en vigeur les affaires mentionnees c nous envoyer les certificats de renouvellement aussitot Bitte halten Sie die unten bezeichneten Angelegenheiten senden Sie uns die amtilichen Empfangsbescheinigungen mobald zu.			INSTRUCTION	ANWEISUNG	
New illez maintenir en vigeur les affaires mentionnees c nous envoyer les certificats de renouvellement aussitot Ritte halten Sie die unten bezeichneten Angelegenheiten senden Sie uns die amtilchen Empfangsbescheinigungen mo bald zu.	Jersey Channel Islands Computer Patent Annuities Inc.	Please	the cer	tloned cases s as soon as	forward sible.
Mersellington D.C.20231 Senden Sie uns die amtlichen Empfangsbescheinigungen m Daid zu. Account no. 08890	ite 904 Med Tagtope VA 22202 C/O RCW COMMISSIONER OF PATENTS	Veu II I e	•	les affaires de renouvelle	tionnees t aussito
000107 Daid zu. Daken senten moe bald zu. Daken senten moe bald zu.	TNGTON	BI tte	die unten	ezelchneten	1
. 08890 bat	0	bald at			Ø
					Date

L AMET BRAY, (As. 12 LONGLOW BLE MALEAR BA G.W. HUGHER, RTM

22

aufrecht

moegal ich st

19/12/85

1 q 1 s so d

970

ci-dessous

to us the

		• ;	e management of the State of th		P.	
Cost	225.00	225.00	225.00	225.00		\$3375.00
/ Patentee Serial No. Filing Date		-217 91 9-1 8DEC 80	-289091-31JUL81	-271088-05JUW81		TOTAL:
Applicant / Pa	MEAD JOHNSON+CO -2444	MITSUBISHI GAS	DENKI KAGAKU	SUMITOMO METAL		
Annuity	7	4	4	υ. •		
D ue Date	JAN. 06	JAN.06	JAN. 06	JAN. 06		06, 1982
Patent No.	4338317	4338373	4338378	5828227		ALL PATENTS DATED July 06,
6	63,63)			· · · · · · · · · · · · · · · · · · ·	TENTS D
Country	(HALF FEES)	(HALF FEES)	(HALF FEES)	(HALF FEES)	· · · · · · · · · · · · · · · · · · ·	ALL PA

USA

USA

YS: O

the maintenance fees due on the above patents OUR CHEQUE FOR \$3375.00 in payment of Please stamp and return the enclosed copy of this letter as is enclosed herewith.

confirmation of receipt.

Yours faithfully

FEB 13 1986 ANN Illinonvin - want

> TELEX: 4182137 CO PAN G TELEPHONE: 0534 75101

CABLE: COPAN, JERSEY

FACSIMILE: 0534 74210, ITT GROUPS 2/3 (24 HOURS)

UNITED STATES DEPARTMENT OF COMMERCE Patent and Trademork Office

EL: COMMISSIONER OF PATENTS AND TRADEMARKS

PAYOR NUMBER 000197

COMPUTER PATENT ANNUITIES 2 COMPUTER PATENT ANNUITIES INCORP. 1111 JEFFERSON DAVIS HIGHWAY 8UITE 514 ARLINGTON: UA 22202

DATE HAILED 01/03/90

088845

MAINTENANCE FEE STATEMENT

The data shown below is from the records of the Patent and Trademark Office. If the maintenance fees and any necessary surcharges have been timely paid for the patents listed below, the notation "PAID" will appear in column 10, "status" below.

If a maintenance fee payment is defective, the reason is indicated by code in column 10, "status" below. An explanation of the codes appears on the reverse of the Maintenance Fee Statement. TIMELY CORRECTION IS REQUIRED IN ORDER TO AVOID EXPLANTION OF THE PATENT. NOTE 37 CFR 1.377. THE PAYMENT(S) WILL BE ENTERED UPON RECEIPT OF ACCEPTABLE CORRECTION. IF PAYMENT OR CORRECTION IS SUBMITTED DURING THE GRACE PERIOD, A SURCHARGE IS ALSO REQUIRED. NOTE 37 CFR 1.20(k) and (i).

If the statement of small entity status is defective the reason is indicated below in column 10 for the related patent number. THE STATEMENT OF SMALL ENTITY STATUS WILL BE ENTERED UPON RECEIPT OF ACCEPTABLE CORRECTION.

ITH NBR	PATENT NUMBER		FEE . AMOUNT	SUR Charge	SERIAL Nuhrer	PATENT . Date	FILE Date	PAY YR	• · · •	STAT
	19,338,317	• •			96/244,464	07/06/82	03/16/81	08	NO	PAID
2	4,338,366	171	495	75	06/244.567	07/06/82	03/17/81	08	סא	PAID

If the "status" column for a patent number listed above does not indicate "PAID" a code or an asterisk (") will appear in the "status" column. Where an asterisk (") appears, the codes are set out below by the related item number. An explanation of the codes indicated in the "status" column and as set out below by the related item number appears on the reverse of the maintenance fee statement.

ITH ATTY DKT
NBR NUMBER
1 356
2 2508R2C

DIRECT THE RESPONSE TOGETHER WITH PART B OF THIS NOTICE, AND ANY QUESTIONS ABOUT THIS NOTICE TO: COMMISSIONER OF PATENTS AND TRADEMARKS, BOX M. FEB, WASHINGTON, DC 20221

P701-439 REV. 1-44

PART A

0534888747-

703 418.3637:8

495,0 -17)

Computer Patent Annuities

Computer Patent Annuities, Inc.

Lighter Patent Annuities, Inc.

Suite 14

Payor Number 000197

Arling in, VA 22202

REEL 234 FRAME | 89

December 22, 1989

NECESTIFICATION	SERIAL NO.	· PATENT DATE	FILING DATE	. AMOUNT
2112	226090	06 Jul 1982	19 Jan 1981	
4338143	248419	06 Jul 1982	27 Mar 1981	495.00
4338211	252691	06 Jul 1982	09 Apr 1981	495.00
4338245	292118	06 Jul 1982	12 Aug 1981	495.00
4338246	295163	06 Jul 1982	21 Aug 1981	495.00
4338317	244464	06 Jul 1982	16 Mar 1981	495.00
4338366	244567	06 Jul 1982	17 Mar 1981	495.00
4338378	289091	06 Jul 1982	31 Jul 1981	495.00
4338456	235744	: 06 Jul 1982	18 Feb 1981	495.00
4338467	233148	06 Jul 1982	10 Feb 1981	495.00
4338471	217116	06 Jul 1982	17 Dec 1980	495.00
4338385	271088	06 Jul 19B2	05 Jun 1981	495.00
4599712	475542	07 Jul 1986	15 Mar 1983	490.00
4590529	587272	20 May 1986	07 Mar 1984	490.00
		•	TOTAL \$14	,545.00

Please stamp and return the enclosed copy of this letter as confirmation of receipt of our payment.

Sincerely,

Resut a melaja

Robert C. Walker

RCW/rk

Enclosures

090 12/27/89 4338317

2 171

4495.00 CK





Computer Patent Annuities

PATENT, DESIGN & TRACE MARK MONEYALS WORLDWIDE TRADE MARK MEADCHUSE

PO Box 778 Jersey JE1 18L Channel Islands

RAY CHOCKY, BARGHA MY GWALLER MACPA

re wen b COLH HURN ELL DO DIG ACA

Telephone: 0534 888711 Fax 0534 435747 Tales: 4182137 COPAN Q CODIC COPANJERSEY

BRISTOL-MYERS SQUIBB ZBM/900 SERIES ST.DATE 1/7/84 OFF RECEIPTS TO BE STORED BY C.P.A.FROM 1/2/90 NO DIV OR PCT IN TITLE FIELD SORT CODE 40 OCTOBER 91

0 1 504786/OFRCPT

Your ref:

03 FEB 1994

Dear Sir

Re: Your case detailed below:

Country Name:

Type Name:

Client's Reference:

Patentee:

Patent No.:

Base date: Client no.:

Annuity:

U.S.A.

Patent

MJ0536-MEAD JOHNSON+CO

4338317

06 JUL 1982

0859207

3

We enclose the official receipt for the payment of the annuity detailed above. This document should be kept in a safe place in case proof of renewal is required at any time. If you would like your official receipts stored by CPA in future, please let us know by signing and returning this letter: a fee of £1 for this service will then be added to each future invoice for annuities paid on your account.

Yours faithfully,

Computer Patent Annuities

575

RECEIPT OF ACCEPTABLE CORRECTION.

ITM NBR	PATENT NUMBER		FEE AMOUNT	SUR CHARGE	SERIAL NUMBER	PATENT	FILE	· · ·	1L YT STAT
1	4,338,317	185	2820		06/244.464	07/06/82	03/16/81	12 N	PAID

If the "status" column for a patent number listed above does not indicate "PAID" a code or an asterisk (*) will appear in the "statue" column. Where an asterisk (*) appears, the codes are set out below by the related item number. An explanation of the codes indicated in the "status" column and as set out below by the related item number appears on the reverse of the maintenance fee statement.

ITM ATTY DKT NBR NUMBER

MJ 536

DIRECT THE RESPONSE TOGETHER WITH ANY QUESTIONS ABOUT THIS NOTICE TO: COMMISSIONER OF PATENTS AND TRADEMARKS, BOX M. FEE, WASHINGTON, DC 20231

PTOL-439 (REV 4-44)

LLXS



UNITED STATES DEPARTMENT OF COMMERCE Patent and Trademark Office

Address: COMMISSIONER OF PATENTE AND TRADEMARKS Washington, D. C. 20221

PAYOR NUMBER

75M8/0110

COMPUTER PATENT ANNUITIES C/O COMPUTER PATENT ANNUITIES, INC. 1111 JEFFERSON DAVIS HIGHWAY SUITE 514, CRYSTAL GATEWAY NORTH ARLINGTON, VA 22202

DATE MAILED 01/10/94

MAINTENANCE FEE STATEMENT

The data shown below is from the records of the Patent and Trademark Office. If the maintenance fees and any necessary surcharges have been timely paid for the patents listed below, the notation "PAID" will appear in column 10, "status" below.

If a maintanance fee payment is defective, the reason is indicated by code in column 10, "status" below. An explanation of the codes appears on the reverse of the Maintenance Fee Statement. TIMELY CORRECTION IS REQUIRED IN ORDER TO AVOID EXPIRATION OF THE PATENT. NOTE 37 CFR 1.377. THE PAYMENT(S) WILL BE ENTERED UPON RECEIPT OF ACCEPTABLE CORRECTION. IF PAYMENT OR CORRECTION IS SUBMITTED. DURING THE GRACE PERIOD, A SURCHARGE IS ALSO REQUIRED. NOTE 37 CFR 1.20(k) and (i).

If the statement of small entity status is defective the reason is indicated below in column 10 for the related patent number. THE STATEMENT OF SMALL ENTITY STATUS WILL BE ENTERED UPON .

		993 - NEFAZODONE HCI OF POST-IND COMMUNICATIONS
DATE	TYPE OF CONTACT	SUMMARY
10/15/82	Original IND	IND is filed. Includes Protocol 030A2-001.
10/22/82	FDA Letter	FDA acknowledges receipt of the IND and assigns IND #20,993 to it.
12/09/82	FDA Letter	FDA comments and suggestions following review of original IND.
04/19/83	CMC Amendment	Response to FDA's letter of 12/09/82 - Chemistry Section.
06/28/83	Protocol Amendment	Protocol 030A2-0001 is submitted.
06/28/83	Letter to FDA	Copy of U.S.A.N. letter listing "Nefazodone" as designated name for MJ13754.
06/28/83	Information Amendment - Clinical	Updated Basic Data Brochure is submitted.
07/12/83	FDA Letter	FDA comments and suggestions pertaining to 04/19/83 chemistry responses.
11/21/83	Annual Report	Summaries of studies 030A2-001-1509 and 030A2-001- 1576.
08/28/84	Protocol Amendment	Protocol 030A2-0002 is submitted.
10/26/84	CMC Amendment	CMC information pertaining to two control agents, 25 mg Imipramine tablets and 25 mg trazadone tablets, is submitted.
11/06/84	Information Amendment - Clinical	Investigator's Report on study 1509 is submitted.
12/05/84	Annual Report	Contains a summary of studies 1509 and 1576 and plans for Protocol 030A2-0002.
01/23/85	Information Amendment - Pharmacology/Toxicology	Report No. JOHN-RE-09241 and Report No. ELRO-SV-09223 is submitted.
05/07/85	Protocol Amendment	Protocol 030A2-0004 is submitted.
05/15/85	Information Amendment - Clinical	Report No. LAND-CL-10576 is submitted.
05/15/85	Protocol Amendment	Protocol 030A2-0006 is submitted.
05/20/85	Protocol Amendment	Protocol 030A2-0005 is submitted.
06/13/85	Information Amendment - Pharmacology/Toxicology	Submission of 4 non-clinical pharmacology reports, 5 toxicology reports and 1 preclinical MAP report.
06/13/85	Information Amendment - Clinical	Clinical Report No. LAND-CL-10576 is re-submitted.

	IND 20 CHRONOLOGY	0993 - NEFAZODONE HCI OF POST-IND COMMUNICATIONS
<u>DATE</u>	TYPE OF CONTACT	SUMMARY
08/30/85	FDA Letter	FDA comments on Clinical and Pharmacokinetic data previously submitted and recommendations concerning this data.
10/02/85	General Correspondence	Response to FDA letter of 08/30/85 regarding Clinical and Pharmacokinetic data previously submitted.
10/02/85	CMC Amendment	CMC Amendment containing revised synthesis, specifications and stability of drug substance and CMC pertinent to nefazodone and matching placebo capsules.
10/25/85	Information Amendment - Pharmacology/Toxicology	Report No. HAWK-HC-11023 is submitted.
10/25/85	Information Amendment - Clinical	Interim Clinical Report No. BARO-PE-10833 and Pharmacokinetic Report No. MAYORF-11006 are submitted.
11/18/85	Protocol Amendment	Protocol 030A2-0007 is submitted.
12/18/85	Protocol Amendment	Protocol 03A0B-002 is submitted.
01/02/86	FDA Letter	Comments on extension phase for planned studies.
02/27/86	Information Amendment - Clinical	Clinical pharmacology report on study 1885 is submitted (HEIM-LR-11343).
02/27/86	CMC Information	CMC information pertaining to 150 mg capsules is submitted.
02/27/86	Information Amendment - Pharmacology/Toxicology	Seven non-clinical pharmacology reports are submitted.
08/20/86	FDA Letter	FDA comments on the 10/25/85 submission of data on single and multiple dose pharmacokinetic study.
08/29/86	Information Amendment - Pharmacology/Toxicology	Two non-clinical pharmacology and 4 toxicology reports are submitted.
08/29/86	Annual Report	Status reports on all studies and a final report on study 1509 are submitted.
12/10/86	Information Amendment - Clinical	Basic data brochure is updated to include results of Phase II studies.
04/13/87	Protocol Amendment	Protocol 03A0A-004 is submitted.
05/06/87	Protocol Amendment	Protocol 03A0B-003 is submitted.
5/06/87	Information Amendment - Clinical	Report RUSS-JW-11761 is submitted.

IND 20993 - NEFAZODONE HCI CHRONOLOGY OF POST-IND COMMUNICATIONS		
DATE	TYPE OF CONTACT	SUMMARY
05/06/87	Information Amendment - CMC	CMC information is submitted for ¹⁴ C-labeled Nefazodone formulations.
05/08/87	Information Amendment - Clinical	Submission of Preliminary Evidence of Efficacy.
06/03/87	FDA Letter	Regarding long-term extension phase of studies.
06/11/87	Annual Report	Consisting of updated summary of all studies currently filed with the IND.
06/15/87	General Correspondence	Response to FDA letter of 06/03/87.
07/24/87	FDA Letter	Comments regarding our 6/15/87 submission.
08/10/87	Information Amendment - Pharmacology/Toxicology	Three toxicology, 3 non-clinical pharmacology and 1 preclinical MAP reports are submitted.
09/15/87	Protocol Amendment	Protocol 03A8A-001 is submitted.
09/15/87	Information Amendment - CMC	CMC information supporting the use of nefazodone, trazodone, buspirone, and matching placebo capsules.
10/16/87	Protocol Amendment	Protocol 59B6A-001 is submitted.
10/16/87	Information Amendment - Pharmacology/Toxicology	Six non-clinical pharmacology reports are submitted.
10/16/87	Information Amendment - Clinical	Report ROBE-DL-25114, a preliminary report is submitted.
10/26/87	Safety Report	Initial written report.
11/23/87	FDA Letter	Regarding the enrollment of women of child bearing potential.
01/20/88	Annual Report	Contains status report on all clinical studies, pre-clinical and CMC activity.
01/20/88	Information Amendment - Clinical	Basic data brochure is updated with results of Open and Double-Blind Phase II studies.
07/07/88	Protocol Amendment	Protocol CN104-002 is submitted.
07/07/88	Information Amendment - CMC	CMC information in support of imipramine capsules used in clinical trials.
09/14/88	Information Amendment - Pharmacology/Toxicology	Report TAYL-DP-25249 is submitted.
12/14/88	Protocol Amendment	Protocol CN104-006 is submitted.
2/01/89	Annual Report	Includes 15 non-clinical summaries or study reports; three pharmacokinetic reports on studies 2553, 2146 and 2025; two clinical reports on studies 2025 and 2553; seven publications; ten published abstracts.

	IND 20993 - NEFAZODONE HCI CHRONOLOGY OF POST-IND COMMUNICATIONS		
DATE	TYPE OF CONTACT	SUMMARY	
02/13/89	Protocol Amendment	Protocol CN104-005 is submitted.	
09/29/89	Protocol Amendment	Protocol CN104-009 is submitted.	
09/29/89	Information Amendment - Clinical	Updated basic data brochure is submitted. Contains results of open and double-blind Phase II studies.	
10/04/89	Protocol Amendment	Protocol CN104-011 is submitted.	
10/04/89	Information Amendment - CMC	CMC information in support of fluoxetine capsules used in clinical trials.	
10/15/89	Information Amendment - Pharmacology/Toxicology	Report TAYL-DP-09224 - Pharmacology Summary is submitted.	
11/07/89	Protocol Amendment	Protocol CN104-021 is submitted.	
11/28/89	Information Amendment - CMC	CMC information in support of dextroamphetamine capsules and diazepam capsules to be used in clinical studies.	
11/28/89	Protocol Amendment	Protocol CN104-015 is submitted.	
11/28/89	Protocol Amendment	Protocol CN104-025 is submitted.	
11/28/89	Protocol Amendment	Protocol CN104-023 is submitted.	
11/28/89	Protocol Amendment	Protocol CN104-013 is submitted.	
12/15/89	Information Amendment - CMC	CMC information in support of an oral nefazodone solution.	
12/20/89	Information Amendment - Pharmacology/Toxicology	Report BRAS-JP-25416 is submitted.	
01/10/90	Protocol Amendment	Protocol CN104-030 is submitted.	
01/12/90	Information Amendment - CMC	CMC information supporting the use of cimetidine tablets in clinical trials.	
01/18/90	Protocol Amendment	Protocol CN104-022 is submitted.	
01/26/90	Protocol Amendment	Protocol CN104-017 is submitted.	
3/13/90	FDA Meeting	End-of-Phase II meeting	
03/22/90	Information Amendment - Pharmacology/Toxicology	Two non-clinical pharmacology study reports are submitted.	
03/30/90	Information Amendment - Pharmacology/Toxicology	Report GEIS-MA-25360 is submitted.	
03/30/90	Annual Report	Status report on all studies currently open under this IND along with summaries of pre-clinical and CMC activity.	
07/15/90	Protocol Amendment	Protocol CN104-038 is submitted.	

IND 20993 - NEFAZODONE HCI CHRONOLOGY OF POST-IND COMMUNICATIONS		
DATE	TYPE OF CONTACT	SUMMARY
07/26/90	Safety Report	Initial written report.
08/17/90	Information Amendment - CMC	CMC information supporting drug substance; alternative manufacturing facilities for drug substance and drug products.
08/29/90	Protocol Amendment	Protocol CN104-035 is submitted.
09/20/90	Information Amendment - CMC	CMC information in support of the use of triazolam and haloperidol capsules in clinical studies.
09/20/90	Protocol Amendment	Protocol CN104-036 is submitted.
10/08/90	General Correspondence	Draft protocols CN104-043 and CN104-047 are submitted.
10/08/90	Protocol Amendment	Protocol CN104-037 is submitted.
10/24/90	Safety Report	Follow-up report.
10/30/90	Information Amendment - CMC	CMC information pertaining to the manufacture of deuterated nefazodone.
10/30/90	Protocol Amendment	Protocol CN104-043 (Finalized) is submitted.
11/07/90	General Correspondence	Request for a Pre-NDA meeting with the Agency.
11/12/90	Information Amendment - CMC	Response to an FDA request for dissolution data.
11/27/90	Information Amendment - CMC	CMC information pertaining to the D ₇ -nefazodone for protocol CN104-047.
11/27/90	Protocol Amendment	Protocol CN104-047 (Finalized) is submitted.
01/03/91	Protocol Amendment	Protocol CN104-040 is submitted.
01/28/91	Protocol Amendment	Protocol CN104-053 is submitted.
02/07/91	Annual Report	Annual report is submitted.
2/11/91	FDA Meeting	Pre-NDA meeting
03/27/91	FDA Meeting	CMC Pre-NDA meeting
05/22/91	Protocol Amendment	Protocol CN104-903 is submitted.
06/26/91	Information Amendment - CMC	CMC Information providing for alternative packaging components; alternative packaging site; updated stability data; and CMC information pertaining to digoxin capsules and placebo tablets.
06/26/91	Protocol Amendment	Protocol CN104-057 is submitted.
06/28/91	Protocol Amendment	Protocol CN104-045 is submitted.
07/01/91	Protocol Amendment	Protocol CN104-058 is submitted.
08/05/91	Protocol Amendment	Protocol CN104-068 is submitted.

IND 20993 - NEFAZODONE HCI CHRONOLOGY OF POST-IND COMMUNICATIONS		
DATE	TYPE OF CONTACT	SUMMARY
09/06/91	NDA	NDA is submitted- #20-152.
09/18/91	Protocol Amendment	Protocol CN104-054 is submitted.
10/08/91	Protocol Amendment	Protocol CN104-063 is submitted.
11/05/91	Protocol Amendment	Protocol CN104-069 is submitted.
11/06/91	Information Amendment - CMC	CMC Information: Revised synthesis of nefazodone drug substances; additional drug substance manufacturing site; placebo capsules; and alprazolam capsules.
11/19/91	Protocol Amendment	Protocol CN104-074 is submitted.
11/19/91	Protocol Amendment	Protocol CN104-056 is submitted.
12/02/91	Protocol Amendment	Protocol CN104-082 is submitted.
12/17/91	Information Amendment - Clinical	Updated Investigators Brochure incorporating overview of clinical findings from the NDA.
01/03/92	Protocol Amendment	Protocol CN104-081 is submitted.
01/17/92	Information Amendment - CMC	CMC information on lorazepam capsules and updated specifications for nefazodone drug substance.
02/18/92	Protocol Amendment	Protocol CN104-080 is submitted.
02/18/92	Protocol Amendment	Protocol CN104-076 is submitted.
03/17/92	Information Amendment - CMC	CMC Information on warfarin tablets.
03/17/92	Protocol Amendment	Protocol CN104-066 is submitted.
04/06/92	Protocol Amendment	Protocol CN104-075 is submitted.
04/24/92	Protocol Amendment	Protocol CN104-078 is submitted.
05/28/92	Annual Report	Annual Report is submitted.
09/15/92	Protocol Amendment	Protocol CN104-087 is submitted.
09/15/92	Protocol Amendment	Protocol CN104-064 is submitted.
09/22/92	Information Amendment - Clinical	Updated Investigators Brochure is submitted.
10/06/92	Protocol Amendment	Protocol CN104-077 is submitted.
10/09/92	Safety Report	Initial written report.
10/09/92	Information Amendment - Clinical	Addendum #4 to the Investigators Brochure.
10/26/92	Protocol Amendment	Protocol CN104-083 is submitted.
11/05/92	Protocol Amendment	Protocol CN104-101 is submitted.

IND 20993 - NEFAZODONE HCI CHRONOLOGY OF POST-IND COMMUNICATIONS		
<u>DATE</u>	TYPE OF CONTACT	SUMMARY
11/17/92	Information Amendment - Pharmacology/Toxicology	One non-clinical pharmacology study report, 1 toxicology study report and 8 pre-clinical MAP study reports are submitted.
12/18/92	Information Amendment - CMC	Updated CMC information on drug substance and drug products; additional manufacturing site for drug substance and drug product.
01/13/93	Annual Report	Annual Report is submitted.
02/05/93	Protocol Amendment	Protocol CN104-092 is submitted.
02/19/93	Protocol Amendment	Protocol CN104-113 is submitted.
02/19/93	Protocol Amendment	Protocol CN104-110 is submitted.
02/19/93	Protocol Amendment	Protocol CN104-111 is submitted.
02/19/93	Information Amendment - CMC	CMC information on sertraline capsules to be used in clinical trials.
03/05/93	Protocol Amendment	Protocol CN104-115 is submitted.
03/08/93	Information Amendment - CMC	CMC information for nefazodone tablets and an additional packaging and labeling facility.
03/23/93	Protocol Amendment	Protocol CN104-104 is submitted.
03/23/93	Protocol Amendment	Protocol CN104-103 is submitted.
03/26/93	Protocol Amendment	Protocol CN104-088 is submitted.
04/02/93	Protocol Amendment	Protocol CN104-106 is submitted.
04/13/93	Protocol Amendment	Protocol CN104-105 is submitted.
04/13/93	Protocol Amendment	Protocol CN104-109 is submitted.
04/23/93	Protocol Amendment	Protocol CN104-114 is submitted.
05/07/93	Information Amendment - CMC	CMC information on imipramine capsules and an additional packaging site for clinical supplies.
07/23/93	Protocol Amendment	Protocol CN104-109 is submitted.
08/02/93	Safety Report	Initail written report.
08/06/93	Protocol Amendment	Protocol CN104-121 is submitted.
08/19/93	CMC Amendment	A new packaging site for nefazodone hydrochloride tablets is identified.
10/21/93	Protocol Amendment	Protocol CN104-119 is submitted.
01/28/94	Annual Report	Status report of investigations conducted under this IND for the period from 6/16/92 through 11/14/93.

	IND 20993 - NEFAZODONE HCI CHRONOLOGY OF POST-IND COMMUNICATIONS		
DATE	TYPE OF CONTACT	SUMMARY	
03/04/94	Protocol Amendment	Protocol CN104-127 is submitted.	
07/07/94	CMC Amendment	New positive control product for upcoming clinical trials.	
07/25/94	Information Amendment- Toxicology	Non-clinical Report: Antigenicity Study in Guinea Pigs and Mice.	
09/02/94	Protocol Amendment	Protocol CN104-029 is submitted.	

	NDA 20-152 SERZONE® (Nefazodone HCl) Tablets Chronology for Patent Term Extension		
Date	Type of Contact	Summary / Description	
9/6/91	Submission #001	Original NDA is submitted (Volumes 1.1 - 1.277)	
9/11/91	FDA Letter	Acknowledges receipt of NDA	
9/20/91	FDA Letter	Acknowledges receipt of NDA and corrects "filing" date. If acceptable, "Filing date will be 11/6/91".	
11/5/91	Submission #002	Expanded Table of Contents for the entire NDA is submitted, as requested.	
11/15/91	Submission #003	Request for a meeting to discuss our proposals and present prototypes of the computer systems we will provide for the electronic submission of portions of the NDA.	
1/7/92	FDA Letter	FDA letter requesting reanalysis of certain placebo-controlled studies.	
1/17/92	Submission No.004	First Safety Update is submitted	
1/21/92	Submission No.005	Agenda for 1/30/92 meeting regarding the demonstration of the computer systems prototypes for the electronic submission of portions of the NDA.	
1/30/92	FDA Meeting	Presentation of the prototypes of the computer systems for Document Review (WP5.1) and Image Review (CRFs) that we be loaned to the Division.	
2/14/92	FDA Meeting	Installation of Case Report Forms from Safety Update No. 1 the Image Review Computer System.	
2/20/92	Submission No. 006	Tumor data from carcinogenicity studies are submitted in response to a 1/31/92 request from the Agency.	
2/26/92	Submission No. 007	Response to the 1/7/92 letter requesting additional statistical analyses.	
2/27/92	Submission No. 008	Replacement pages for 2 appendices for the final study report for Protocol CN104-005.	
3/16/92	Submission #009	Replacement pages for integrated safety summary (Volume 1.188).	
3/18/92	Submission #010	WP5.1 documents on diskette of NDA section 6 (Human Biopharmaceutics) reports and summaries for the Biopharmaceutics reviewer(s).	
3/31/92	Submission #012	CMC Amendment - Revised Environmental Assessment Report	
4/3/92	Submission #011	Amendment No. 3 to Report LEMA-P-12909 to correct for errors found while preparing the electronic data for submission (Submission No. 006).	
4/15/92	Submission #013	Proposal for submission of individual displays of safety data as electronic images.	
4/30/92	Submission #014	Response to request for dose and duration of treatment displays	

	Chron	SERZONE® (Nefazodone HCl) Tablets ology for Patent Term Extension
Date	Type of Contact	Summary / Description
5/12/92	Submission #026	Issues and list of Attendees for the scheduled teleconference discuss our 2/27/92 response to the 1/7/92 FDA letter.
6/11/92	Submission #016	Post-Hoc exploratory analysis results for Protocol CN104-00
6/18/92	FDA Teleconference	Discussion of our 2/27/92 (Submission No. 007) response to the Agency's request for Re-Analysis of several Placebo-Controlled Trials (1/7/92 letter) and our proposal for the electronic submission of the individual safety data displays (Submission #13).
6/29/92	Submission #017	Minutes of teleconference of 6/18/92
7/20/92	FDA Letter	Fax draft of CMC deficiency Letter
8/13/92	Submission #018	Individual Safety Data Displays are submitted.
8/18/92	Submission #019	Graphs of the primary efficacy variables for subcenters in studies conducted under Protocols CN104-005, CN104-002-0 and 03A0A-004A-2407.
8/25/92	FDA Letter	Regarding 7/20/92 FAX of CMC deficiency letter.
9/2/92	Teleconference	To discuss the completion (format and content) of the request safety table templates provided on 9/1.
9/4/92	FAX	Minutes of teleconference of 9/2/92.
10/1/92	Submission #020	Copies of additional CRF pages found missing from the NDA paper copy during the Image Review Computer System QA review.
10/16/92	Submission #021	Submission of completed safety table templates (9/1/92 request).
10/23/92	Submission #022	Printed copies & WP5.1 Diskette of revised safety table templates as requested.
11/18/92	Submission #023	Response to the 7/17/92 CMC review letter and submission of a modified NDS synthesis and NDS manufacturing site.
12/8/92	Submission #024	Descriptive dataset information for 2 placebo-controlled trials for use by the statistical reviewer.
12/16/92	Submission #025	Additional (11/6/92 request) and revised (9/1/92 request) Safet Table Templates.
2/9/93	Submission #026	Revised descriptive dataset information for 2 placebo-controlle trials for use by the statistical reviewer.
3/4/93	Submission #027	Submission of WP5.1 documents - Requested Table of All Studies; Table of Controlled Studies; 5 Key Study Summaries Efficacy Data Tables; Nefazodone Safety Tables Update
3/16/93	FAX from FDA	Requesting Clarification Regarding Cutoff Dates; Enumeratin Patients from Crossover Studies; and Patient Exposure Years.

NDA 20-152 SERZONE® (Nefazodone HCl) Tablets Chronology for Patent Term Extension		
Date	Type of Contact	Summary / Description
3/29/93	Submission #028	The following summary tables are submitted: (A) Overview of Efficacy Trials (B) Important Clinical Issues (B-1) Anxiety as a Predictor of Response (B-2) Efficacy of Nefazodone in the Long-Term Treatment of Depression Report (B-3) Nefazodon Overview of Clinical Findings, and (B-4) Nefazodone Summary of Safety Information from Elderly Patients and Subjects
3/30/93	Submission #029	A request for a teleconference to discuss issues related to the submission of additional safety data and the scheduling of the Advisory Committee meeting.
4/7/93	Submission #030	Response to the 3/16 Fax.
4/19/93	Submission #032	Final study reports on studies CN104-053-001 and CN104-068-001 are submitted.
4/23/93	Submission #031	Patient exposure data for all treatment groups and suicide liability rates for these treatment groups using PEY calculations based on exposure as of Safety Update No. 1.
4/27/93	Submission #033	Adaptation Table is submitted in response to a 3/29 request.
4/30/93	Submission #034	Response to a request for "short position papers" on the following safety-related topics: Withdrawal Phenomena and Abuse Potential; Human Reproductive Data; Overdose; Drug-Demographic, Drug-Disease and Drug-Drug Interactions.
5/7/93	Submission #035	Submission of the Proprietary Name - "Serzone™"
5/10/93	Submission #036	Patient exposure data for all treatment groups and suicide liability rates for these treatment groups using PEY calculations based on exposure as of 4/15/93.
5/10/93	Submission #037	Submission of copies of the Word Perfect 5.1 files of the biopharmaceutics reports included in the original NDA.
5/12/93	Submission #038	Information on the impact on the rate of patient discontinuation of an amendment to Protocol CN104-005 which modified the recommended dosing regimen to discourage rapid runs up to the maximum dose.
5/18/93	Submission #039	Additional statistical analyses and appendices for Protocol CN104-005.
5/20/93	Submission #040	A revised Environmental Assessment report.
5/25/93	Submission #041	To provide a desk copy of the dissolution data submitted in the NDA.
5/25/93	Submission #042	Provides a proposal for Safety Update No. 2.
5/25/93	Submission #043	Table of the demographic information and a summary table of the pharmacokinetic parameters for specific studies submitted.

NDA 20-152 SERZONE® (Nefazodone HCl) Tablets Chronology for Patent Term Extension		
Date	Type of Contact	Summary / Description
5/26/93	Submission #044	Revisions to the 1% AE table in the Safety Table Templates adjust percentages for gender.
5/27/93	Submission #045	Demographic information and a summary table of the pharmacokinetic parameters for Study CN104-053.
5/28/93	Submission #046	Submission of a revised table of "Other Events" (Package Insert) and a table of the "Incidence of AE That Led to Discontinuation in Patients Who Discontinued Due to AE, in Open and Double-Blind Trials" that combined both short-term and long-term experience.
6/2/93	Fax from FDA	Request for justification of the doses used in Segment II rabbi
6/4/93	Submission #047	Submission of reports on MAP studies, clinical pharmacology studies, and a pre-clinical study, all in support of revised labeling.
6/3/93	Submission #048	Revised draft labeling is submitted.
6/4/93	Submission #049	Submission of revised table of "Other Events Observed Durin the Premarketing Evaluation" (draft labeling). Correction to Submission No. 46.
6/4/93	Submission #050	Electronic SAS datasets on diskette and printed copies of the supporting documentation for three of our placebo-controlled studies.
6/7/93	Teleconference	To discuss our key efficacy trials.
6/8/93	Submission #051	Response to questions raised in the 5/26 FAX.
6/15/93	Submission #052	Revised and/or new safety tables requested.
6/16/93	Submission #058	Justification of the high-dose used in the Segment II rabbit study.
6/17/93	Submission #054	Submission of comparison of the pharmacologic properties of nefazodone and its principal metabolites.
6/18/93	Submission #055	Response to 6/15 request for additional tables.
6/21/93	Submission #056	Additional information concerning Study 2146 is submitted.
6/21/93	Submission #057	Summary of Postural Hypotension in Nefazodone-Treated Patients is submitted.
6/22/93	Submission #058	Exploratory Age/Gender Safety and Efficacy Analyses and Race Efficacy Analyses.
6/24/93	Submission #059	Electronic SAS datasets for Protocol CN104-005.
6/25/93	Submission #060	Electronic data set in ASCII format for Protocol 030A2-0002.
6/28/93	Submission #061	Table of PK and pharmacologic profile of Nefazodone and its metabolites and the final study report for Protocol CN104-038

NDA 20-152 SERZONE® (Nefazodone HCl) Tablets Chronology for Patent Term Extension		
Date	Type of Contact	Summary / Description
6/28/93	Submission #062	Status of the review of worldwide marketing applications; summary tables of the pharmacology and pharmacokinetics of nefazodone and its metabolites; revised table of All Studies.
6/29/93	Submission #063	Background information for upcoming Advisory Committee Meeting.
6/30/93	Submission #064	Submission of additional safety information.
7/2/93	Submission #065	BMS position regarding confidentiality of information submittee for the Advisory Committee Meeting.
7/2/93	Submission #066	Additional ANCOVA and CMH analyses for Study 03A0A-003-2191 and Protocol 03A0A-004B.
7/2/93	Submission #067	Electronic data sets containing mean plasma concentration data for nefazodone and its metabolites from Protocol CN104-021.
7/7/93	Submission #068	SAS dataset for Protocol CN104-006.
7/9/93	Submission #069 & FAX	Additional safety information pertaining to certain ECG, clinic laboratory and vital signs measurements.
7/12/93	Submission #078	ANCOVA results for Study CN104-001-001.
7/15/93	Submission #071	Copies of the slides BMS intends to present at the Advisory Committee Meeting on 7/19/93.
7/19/93	Meeting	NDA 20-152 is presented to the Psychopharmacologic Drugs Advisory Committee.
7/21/93	Submission #072	Additional slides presented at the Advisory Committee Meetin are submitted.
8/6/93	Submission #073	Additional efficacy tables and a list of non-IND studies.
8/6/93	Submission #074	CMC and clinical rationale for adding 150 and 250 mg tablets to the NDA.
8/6/93	Submission #075	SAS data sets for six placebo-controlled studies.
8/17/93	FDA Teleconference	With the NDA biopharmaceutics reviewers to discuss issues which arose during the Advisory Committee and their review this NDA.
8/25/93	Submission #076	Draft container labels for Serzone Tablets are submitted.
9/1/93	Submission #077	Official submission of the minutes of the teleconference held of 8/17/93.
9/9/93	Submission #078	Information requested in teleconference of 8/17/93 is submitted
9/10/93	Submission #079	A draft "Summary Basis of Approval" (SBA) is submitted.
9/16/93	Submission #080	Information on the nefazodone hydrochloride drug substance packaging material.

	NDA 20-152 SERZONE® (Nefazodone HCl) Tablets Chronology for Patent Term Extension		
Date	Type of Contact	Summary / Description	
9/22/93	Submission #081	Stability data and batch analysis data on batches of Serzone Tablets manufactured with drug substance from Humacao, Puerto Rico facility are submitted.	
9/29/93	Submission #082	Summaries for three biopharm studies, using the format contained in the 9/7/93 FAX are submitted.	
10/1/93	Submission #083	Brief summaries of the three remaining placebo-controlled trials that were not included in Submission No. 027. (030A2-0004/0005; 03A0A-004A; CN104-006)	
10/6/93	Submission #084	Drug Substance synthesis update.	
10/14/93	Submission #085	Response to the 9/17 FAX of CMC deficiencies.	
10/20/93	Submission #086	Worldwide Regulatory status of nefazodone.	
10/26/93	Submission #087	Worldwide Literature update.	
10/27/93	Submission #088	Chronology of submissions to this NDA through Safety Update No. 2.	
10/28/93	Submission #089	Safety Update No. 2 is submitted.	
11/17/93	Submission #090	Revised draft labelling to incorporate information from Safety Update No. 2.	
01/04/94	Submission #091	Response to 12/16 request for updated batch analysis data on Serzone 150 mg and 250 mg tablets.	
01/12/94	Submission #92	Revised Draft Labeling & Drug Interaction Study Reports for Study No. CN104-078-001 and Study No. CN104-057-001.	
2/17/94	Submission #093	Response to a request for a Certificate of Analysis for a New Drug Substance batch made at Humacao.	
3/16/94	Submission #094	FOI-Releasable Environmental Assessment Report and response to reviewer's 3/4 request for additional information.	
3/24/94	Submission #095	Additional information pertaining to the FOI-Releasable Environmental Assessment Report.	
05/12/94	Submission #096	CMC Amendment - Bottle and blister labels for SERZONE tablets.	
11/07/94	FDA Letter	FDA has completed its review and has concluded that the application is APPROVABLE.	
11/19/94	Submission #097	Notification of Intent to Amend	
11/17/94	Submission #098	B-MS response to Approvable Letter (2 Volumes 98.1 / 98.2.	
11/22/94	Submission #099	CMC Amendment - B-MS response to FDA recommendation for revision of dissolution method.	
11/23/94	Submission #100	Proposed Draft Labeling- Response to Approvable Letter.	
11/28/94	Submission #101	Response to FDA Request- Worldwide Literature Update.	

NDA 20-152 SERZONE® (Nefazodone HCl) Tablets Chronology for Patent Term Extension		
Date	Type of Contact	Summary / Description
11/28/94	Submission #102	Response to FDA Request - Worldwide Regulatory Status.
12/06/94	Submission #103	Response to FDA Request - Documentation for labeling revisions that affect the "safety" information in the insert.
12/08/94	FDA Meeting	Discussion of proposed labeling.
12/16/94	Submission #104	CMC - Response to CMC issues addressed in approvable letter.
12/22/94	FDA Letter	APPROVAL LETTER AND LABELING